

226 sitting on rocks at the shore, waiting for the men. If the catch is large, they assist in preparing the fish for market—their duty is to clean thoroughly the cavity of the fish after the men have removed the visceral contents. During my visit three men landed with a small catch—a day's work (pl. 41, 1, 2); one had taken seven fish; each of the others, two. Since the catch was small, the women merely looked on while the men pulled in their boat, washed their nets, and cleaned the fish. A whiskbroomlike implement of esparto was used in the cleaning. Fish are carried home in netted bags called wilal.

[482]

In former times fishing in Andean streams was usually done at night. Fish, attracted by the light of a torch held over the water's edge, were grabbed at the underside of the head and dropped into a pouch suspended from the fisherman's neck. Kauke (a species of mackerel) were most easily caught in this way. Today, fishing in streams is done with hook and line.

Women take from the Pacific such shellfish as macha, loko, mafihue, piure, and ariso. Collecting shellfish is called l'afkentun. Macha bury themselves under the sand. To collect them the woman walks into a sandy place not far from the water's edge, plants a stick in the sand, supports herself by leaning upon it with both hands, and digs both feet into the sand, moving them back and forth until she feels the macha, which she then digs out by hand.

Loko and mafihue attach themselves firmly to rocks near the water's edge and are pried loose with a crowbarlike iron implement. One used by a woman was 13 inches long, $\frac{1}{2}$ inch thick, 3 inches wide at prying end; with it she loosened the shellfish from all sides; "it is best to detach them from the bottom last, so that you can catch them as they fall." Shellfish, too, are carried home in wilal.

[492]

TRANSPORTATION

484 According to Cooper's sources (1946, p. 712), the Araucanians had no roads, only trails; bridges (kuikui), consisting of one or several logs, spanned small streams. The tumpline and fiber bag of simple-loop netting technique were used for carrying goods. The llama served as a pack animal. Soon after the arrival of the Spaniards, the horse was used for land transportation.

[487]

Today anyone wishing to go a short distance, "to the neighbors or to the brook or the woods nearby," walks. From every ruka footpaths lead in several directions—one always leads to the source of water supply. A woman on foot carries light-weight things, maybe vegetables and ears of grain or herbs, in either a basket (pls. 47, 51; 481, 492).

The Mapuche-occupied area of the Frontera is roughly that of the state of Delaware and covers several political provinces and three major geographical zones. The latter are generally referred to as the coastal range and narrow coastal plain, the Central Valley, and the Andean foothills and interior valleys. There was once a dense evergreen forest covering the greater part of central Chile, but today the larger stands of timber are found mostly in the Andes and the coastal mountains, the Central Valley having been cleared of trees in the process of agricultural expansion and town building. This is the ancestral heartland of Mapuche territory. It is still undergoing colonization by white settlers.

The Andes are the most impressive topographical feature in the area, rising well above 15,000 feet, with numerous towering volcanoes. Snow-covered the year round, these volcanoes occasionally erupt and cause great damage to settlements in the surrounding country, as a consequence of which there is always heightened ceremonial activity among the Mapuche. The several low passes south of Villarrica and one near Lonquimay are used by migrant workers and tourists going to Argentina and back, but they are almost impassable in winter. In the high Andes agriculture is not possible, but it is practiced in the foothills. The more precipitous terrain is used for pasturing sheep, cattle, and horses.

The coastal range, which has an average altitude of only 1,000 feet, although reaching 7,000 feet in places, is relatively unproductive in terms of Mapuche economy. Its stands of timber are exploited mainly by Chileans. Mapuche graze some cattle along the mountain slopes, but most of the area is not inhabited by Indians. There are a few colonies of small freeholders, colonos and *parreteros*, and some extensive haciendas or *fundos* found in the mountainous belt along the coast.

In many places the coastal range approaches the shore line, but there is a narrow coastal strip occupied by small numbers of Mapuche. Most of the coastal area is too wet for successful wheat production and is given over to potatoes, barley, linseed, and other crops which grow in very moist soil. Wheat and oats are grown in limited amounts in favorable places. Fairly ample natural pasturage supports a large number of cattle.

The Central Valley, lying between the Andes and the coastal range, provides some of the best wheatland in Chile. The soil in most of the valley is rich, composed of glacial deposits and volcanic ash. There

There
 133 are large level sections, but the uniformity is broken by numerous
 487 hills and spurs emanating from the Andes and the coastal mountains,
 496 especially along the southern border of Cautín Province where the
 C two ranges abut in a narrow pass through which the central railroad
 A runs.

132 The climate of this part of Chile is characterized by cool, dry sum-
 mers and abundant winter rainfall. Precipitation in Cautín Province
 averages more than 80 inches a year, reaching more than 100 inches in
 the Andes and falling below 80 in parts of the Central Valley which
 lie in the rain shadow of the coastal range. The average temperature
 is about 65 degrees Fahrenheit in the warmest month and about 50
 degrees in the coldest, indicating no great range of variation through-
 out the year. Temperature ranges are conditioned both by altitude
 and proximity to the Pacific Ocean. Winter snows occur in the Andes
 and their foothills, while freezing temperatures are rare in the Central
 Valley and along the coast.

C
 A
 131 The bulk of the population, both Mapuche and Chilean, is found
 162 in the Central Valley. It is here that most of the Chilean cities and
 towns are situated. While the largest number of reservations are found
 in this sector of Araucanía, it is also in this region that the greatest
 248 displacement of Indians has occurred. Mapuche territory has shrunk
 as a consequence of its importance in the forceful control of the
 fighting Mapuche throughout the colonial era as well as a result of its
 importance in the agricultural expansion of the colonizing society
 after the defeat and pacification of the Mapuche in the early 1880's.

A
 361 Temuco, whose population was more than 50,000 in 1953, is the
 C capital of Cautín Province and the largest commercial and industrial
 361 center in the Frontera. It is the hub of highway and railroad trans-
 portation, the center of regional political activity, and has many
 schools, several hospitals, banks, industries (flour, wool, and lumber-
 processing plants), government railroad shops, and many retail stores.

C
 A
 496 The main railroad line runs through Temuco from north to south
 and has several trunks branching east and west through a number of
 small towns which serve as centers for shipping local produce. These
 towns range in size from a little more than 5,000 persons (e.g. Vi-
 llarrica, Nueva Imperial) to 1,000 or less. Some of them are centers
 for local fairs at which animals are selected for shipment to Temuco
 and the cities of northern Chile. Near the Andes and the coastal
 mountains they also serve as repositories for timber, which is brought

443
[452] tain. Interest rates are sometimes in excess of 100 per cent. For the most part, the Mapuche are ill at ease and naive in market and credit operations.

[439] Markets are available to all reservation Mapuche, although the Indians near the provincial capital, Temuco, and the larger secondary towns have stronger ties to the regional markets and are more frequently involved in a greater-than-reservation economic structure.

496 The railroad which runs through the Central Valley from north to south, and the several branch lines running east and west, service the Mapuche areas. In addition, there are a number of all-weather roads connecting the reservations with the regional markets. The remoter reservations are linked to the better roads, where trucks and buses are available, by ox roads and foot trails which, for the most part, are not passable in the wet winter months. Because of poor

491
443 transportation, for example, Mapuche are sometimes unable to sell firewood during the winter months, at a time when their food reserves are ebbing, cash is much needed, and there is a demand for firewood in the towns.

439 As a rule, Mapuche tend to sell garden produce, apples, barnyard fowl, a few pigs and sheep for the purpose of obtaining small amounts of cash for immediate use. There is always a seasonal abundance, but little or no thought of stretching it out over the year. This results in the paradox of postharvest surpluses in an economy of bare subsistence. These sales, however, enable the Indians to buy lard, kerosene, pots, plates, knives, etc., and "luxuries" such as matches, mate (Paraguayan "tea"), cigarettes, wine, clothing, and other items which represent rather newly acquired needs. One sees both men and women carrying their wares to town on trucks and buses or in oxcarts. A single chicken may be carried more than 20 kilometers and sold to make a small cash purchase.

452
[437] Credit is scarce. For most purchases, the Mapuche is required to pay *al contado*, or cash on the barrelhead. This is especially so for small purchases, such as the items listed above, for there are very few storekeepers who are willing to keep credit accounts for Mapuche. Shopkeepers regard them as poor risks either because they are to be generally untrustworthy or because they are not to be able to liquidate their credit within a reasonably short time.

[432] Nevertheless, Mapuche are able to raise cash or obtain seeds through credit negotiations under certain circumstances. Agents from the towns make a tour of the country in the preharvest season to in-